

WHAT IS CLAIMED IS:

1. Apparatus for modifying a property of a brain of a patient, comprising:

one or more electrodes, adapted to be applied to a site selected from a group of sites consisting of: a sphenopalatine ganglion (SPG) of the patient and a neural tract originating in or leading to the SPG; and

a control unit, adapted to drive the one or more electrodes to apply a current to the site capable of inducing an increase in permeability of a blood-brain barrier (BBB) of the patient.

2. Apparatus for modifying a property of a brain of a patient, comprising:

one or more electrodes, adapted to be applied to a site selected from a group of sites consisting of: a sphenopalatine ganglion (SPG) of the patient and a neural tract originating in or leading to the SPG; and

a control unit, adapted to drive the one or more electrodes to apply a current to the site capable of inducing an increase in cerebral blood flow of the patient.

3. Apparatus according to claims 1, wherein the one or more electrodes are adapted for a period of implantation in the patient greater than about one month.

4. Apparatus according to claim 1, and comprising a wire, adapted to connect the control unit to the one or more electrodes, wherein the control unit is adapted to drive the one or more electrodes from a position external to the patient.

5. Apparatus according to claim 1, wherein the control unit is adapted to drive the one or more electrodes by wireless communication from a position external to the patient.

6. Apparatus according to claim 5, and comprising an electromagnetic coupling, adapted to couple the control unit and the one or more electrodes.

7. Apparatus according to claim 5, wherein the control unit is adapted to be in electro-optical communication with the one or more electrodes.

8. Apparatus according to claim 5, wherein the control unit is adapted to be in electro-acoustic communication with the one or more electrodes.

9. Apparatus according to claim 1, wherein the control unit is adapted to be implanted in a nasal cavity of the patient.

10. Apparatus according to claim 1, wherein the one or more electrodes are adapted to be implanted in a nasal cavity of the patient.

11. Apparatus according to claim 1, wherein at least one of the one or more electrodes comprises a flexible electrode, adapted for insertion through a nostril of the patient and to extend therefrom to the site.

12. Apparatus according to claim 1, and comprising at least one biosensor, adapted to measure a physiological parameter of the patient and to generate a signal responsive thereto, wherein the control unit is adapted to modify a parameter of the applied current responsive to the signal.

13. Apparatus according to claim 12, wherein the biosensor comprises a blood flow sensor.

14. Apparatus according to claim 12, wherein the biosensor comprises a temperature sensor.

15. Apparatus according to claim 12, wherein the biosensor comprises a chemical sensor.

16. Apparatus according to claim 12, wherein the biosensor comprises an ultrasound sensor.

17. Apparatus according to claim 12, wherein the biosensor comprises transcranial Doppler (TCD) apparatus.

18. Apparatus according to claim 12, wherein the biosensor comprises laser-Doppler apparatus.

19. Apparatus according to claim 12, wherein the biosensor comprises a systemic blood pressure sensor.

20. Apparatus according to claim 12, wherein the biosensor comprises an intracranial blood pressure sensor.

21. Apparatus according to claim 20, wherein the intracranial blood pressure sensor comprises a detecting element adapted to be fixed to a cerebral blood vessel, and wherein the control unit is adapted to analyze the signal to detect an indication of a change in blood pressure indicative of a clot.

22. Apparatus according to claim 12, wherein the biosensor comprises a kinetics sensor.

23. Apparatus according to claim 22, wherein the control unit is adapted to analyze the signal to detect an indication of a change in body disposition of the patient.

24. Apparatus according to claim 12, wherein the biosensor comprises an electroencephalographic(EEG) sensor.

25. Apparatus according to claim 12, wherein the biosensor comprises a blood vessel clot detector.

26. Apparatus according to claim 1, wherein the control unit is adapted to configure the current so as to facilitate uptake of a drug through the BBB when the permeability of the BBB is increased.

27. Apparatus according to claim 2, wherein the control unit is adapted to configure the current so as to increase a diameter of a blood vessel and allow an embolus

that is located at a site in the blood vessel to move from the site in the blood vessel.

28. Apparatus according to claim 2, wherein the control unit is adapted to drive the one or more electrodes to apply the current responsive to an indication of stroke.

29. A method for modifying a property of a brain of a patient, comprising:

selecting a site from a group of sites consisting of: a sphenopalatine ganglion (SPG) of the patient and a neural tract originating in or leading to the SPG; and

applying a current to the site capable of inducing an increase in permeability of a blood-brain barrier (BBB) of the patient.

30. A method for modifying a property of a brain of a patient, comprising:

selecting a site from a group of sites consisting of: a sphenopalatine ganglion (SPG) of the patient and a neural tract originating in or leading to the SPG; and

applying a current to the site capable of inducing an increase in cerebral blood flow of the patient.

31. A method according to claim 29, wherein selecting the site comprises implanting an electrode at the site, designated to remain in the patient for a period greater than about one month.

32. A method according to claim 29, wherein selecting the site comprises placing an electrode at the site, and wherein applying the current comprises communicating with the electrode by wired communication from a position external to the patient.

33. A method according to claim 29, wherein selecting the site comprises placing an electrode at the site, and wherein applying the current comprises communicating with the electrode by wireless communication from a position external to the patient.

34. A method according to claim 33, wherein communicating comprises communicating via electromagnetic coupling.

35. A method according to claim 33, wherein communicating comprises communicating via electro-optical coupling.

36. A method according to claim 33, wherein communicating comprises communicating via electro-acoustic coupling.

37. A method according to claim 29, wherein applying the current comprises implanting a control unit in a nasal cavity of the patient.

38. A method according to claim 29, wherein applying the current comprises implanting one or more electrodes in a nasal cavity of the patient.

39. A method according to claim 38, wherein implanting comprises inserting a flexible electrode through a nostril of the patient.

40. A method according to claim 29, and comprising sensing a physiological parameter of the patient and generating a signal responsive thereto, wherein applying the current comprises modifying a parameter of the applied current responsive to the signal.

41. A method according to claim 40, wherein sensing comprises sensing blood flow of the patient.

42. A method according to claim 40, wherein sensing comprises sensing a temperature of the patient.

43. A method according to claim 40, wherein sensing comprises sensing presence of a chemical.

44. A method according to claim 40, wherein sensing comprises detecting ultrasonic energy.

45. A method according to claim 40, wherein sensing comprises performing a transcranial Doppler (TCD) technique.

46. A method according to claim 40, wherein sensing comprises performing a laser Doppler technique.

47. A method according to claim 40, wherein sensing comprises sensing systemic blood pressure of the patient.

48. A method according to claim 40, wherein sensing comprises sensing intracranial blood pressure of the patient.

49. A method according to claim 48, wherein sensing intracranial blood pressure fixing to a cerebral blood vessel a detecting element capable of generating the signal, and analyzing the signal to detect an indication of a change in blood pressure indicative of a clot.

50. A method according to claim 40, wherein sensing comprises sensing a kinetic disposition of the patient.

51. A method according to claim 50, wherein sensing the kinetic disposition comprises detecting an indication of a change in body disposition of the patient.

52. A method according to claim 40, wherein sensing comprises sensing electroencephalographic (EEG) data.

53. A method according to claim 40, wherein sensing comprises detecting presence of an embolus in a blood vessel of the patient.

54. A method according to claim 29, wherein applying the current comprises configuring the current so as to facilitate uptake of a drug through the BBB when the permeability of the BBB is increased.



55. A method according to claim 30 wherein applying the current comprises configuring the current so as to increase a diameter of a blood vessel and allow an embolus that is located at a site in the blood vessel to move from the site in the blood vessel.

56. A method according to claim 30, wherein applying the current comprises applying the current responsive to an indication of stroke.

57. A method according to claim 29, wherein selecting the site comprises implanting an electrode at the site, designated to remain in the patient for a period less than about one week.

58. Apparatus according to claim 1, wherein the one or more electrodes are adapted for a period of implantation in the patient less than about one week.

59. Vascular apparatus, comprising:

a detecting element, adapted to be fixed to a blood vessel of a patient and to generate a signal responsive to energy coming from the blood vessel; and

a control unit, adapted to analyze the signal so as to determine an indication of an embolus in the blood vessel.

60. Apparatus according to claim 59, wherein the detecting element comprises an energy transmitter and an energy receiver.

61. Apparatus according to claim 60, wherein the energy transmitter comprises an ultrasound transmitter.

62. Apparatus according to claim 60, wherein the energy transmitter comprises a transmitter of electromagnetic energy.

63. A method for detecting, comprising:  
fixing a detecting element to a blood vessel of a patient;  
generate a signal responsive to energy coming from the blood vessel; and  
analyzing the signal so as to determine an indication of an embolus in the blood vessel.

64. A method according to claim 64, wherein generating the signal comprises transmitting energy at the blood vessel.

65. A method according to claim 64, wherein generating the signal comprises transmitting ultrasound energy at the blood vessel.

66. A method according to claim 64, wherein generating the signal comprises transmitting electromagnetic energy at the blood vessel.

67. Apparatus according to claim 1, wherein the control unit is adapted to configure the current so as to treat a condition of the patient.

68. Apparatus according to claim 1, wherein the control unit is adapted to set a parameter of the current, so as to induce the increase in permeability of the BBB.

69. Apparatus according to claim 68, wherein the parameter includes a frequency of the current, and wherein the control unit is adapted to set the frequency of the current, so as to induce the increase in permeability of the BBB.

70. Apparatus according to claim 69, wherein the control unit is adapted to set the frequency to be less than about 10 Hz, so as to induce the increase in permeability of the BBB.

71. Apparatus according to claim 69, wherein the control unit is adapted to set the frequency to be greater than about 10 Hz, so as to induce the increase in permeability of the BBB.

72. Apparatus according to claim 68, wherein the parameter includes an amplitude of the current, and wherein the control unit is adapted to set the amplitude of the current, so as to induce the increase in permeability of the BBB.

73. Apparatus according to claim 68, wherein the parameter includes a waveform of the current, and wherein the control unit is adapted to set the waveform of the current, so as to induce the increase in permeability of the BBB.

74. Apparatus according to claim 73, wherein a shape of the waveform is selected from the list consisting of: an exponential decay, a ramp up or down, a square wave, a monophasic shape, a biphasic shape, a sinusoid, a saw tooth, and a DC component, and wherein the control unit is adapted to set the waveform of the current, so as to induce the increase in permeability of the BBB.

75. Apparatus according to claim 73, wherein the waveform includes one or more pulse bursts, and wherein the control unit is adapted to set the waveform of the current, so as to induce the increase in permeability of the BBB.

76. Apparatus according to claim 26, wherein the drug includes a chemotherapeutic drug, and wherein the control unit is adapted to configure the current so as to facilitate uptake of the chemotherapeutic drug through the BBB when the permeability of the BBB is increased.

77. Apparatus according to claim 1, wherein the control unit is adapted to configure the current so as to facilitate uptake of a growth factor through the BBB when the permeability of the BBB is increased.

78. Apparatus according to claim 1, wherein the control unit is adapted to configure the current so as to facilitate uptake through the BBB of a virus that is an agent of gene therapy when the permeability of the BBB is increased.

79. Apparatus according to claim 1, wherein the control unit is adapted to be implanted at a site at a top of a bony palate of the patient.

80. Apparatus according to claim 1, wherein the control unit is adapted to be implanted at a site at a lower side of a bony palate of the patient.

81. Apparatus according to claim 2, wherein the one or more electrodes are adapted for a period of implantation in the patient greater than about one month.

82. Apparatus according to claim 2, and comprising a wire, adapted to connect the control unit to the one or more electrodes, wherein the control unit is adapted to drive the one or more electrodes from a position external to the patient.

83. Apparatus according to claim 2, wherein the control unit is adapted to drive the one or more electrodes by wireless communication from a position external to the patient.

84. Apparatus according to claim 83, and comprising an electromagnetic coupling, adapted to couple the control unit and the one or more electrodes.

85. Apparatus according to claim 83, wherein the control unit is adapted to be in electro-optical communication with the one or more electrodes.

86. Apparatus according to claim 83, wherein the control unit is adapted to be in electro-acoustic communication with the one or more electrodes.

87. Apparatus according to claim 2, wherein the control unit is adapted to be implanted in a nasal cavity of the patient.

88. Apparatus according to claim 2, wherein the one or more electrodes are adapted to be implanted in a nasal cavity of the patient.

89. Apparatus according to claim 2, wherein at least one of the one or more electrodes comprises a flexible electrode, adapted for insertion through a nostril of the patient and to extend therefrom to the site.

90. Apparatus according to claim 2, and comprising at least one biosensor, adapted to measure a physiological parameter of the patient and to generate a signal responsive thereto, wherein the control unit is adapted to modify a parameter of the applied current responsive to the signal.

91. Apparatus according to claim 90, wherein the biosensor comprises a blood flow sensor.

92. Apparatus according to claim 90, wherein the biosensor comprises a temperature sensor.

93. Apparatus according to claim 90, wherein the biosensor comprises a chemical sensor.

94. Apparatus according to claim 90, wherein the biosensor comprises an ultrasound sensor.

95. Apparatus according to claim 90, wherein the biosensor comprises transcranial Doppler (TCD) apparatus.

96. Apparatus according to claim 90, wherein the biosensor comprises laser-Doppler apparatus.

97. Apparatus according to claim 90, wherein the biosensor comprises a systemic blood pressure sensor.

98. Apparatus according to claim 90, wherein the biosensor comprises an intracranial blood pressure sensor.

99. Apparatus according to claim 98, wherein the intracranial blood pressure sensor comprises a detecting element adapted to be fixed to a cerebral blood vessel, and wherein the control unit is adapted to analyze the signal to detect an indication of a change in blood pressure indicative of a clot.

100. Apparatus according to claim 90, wherein the biosensor comprises a kinetics sensor.

101. Apparatus according to claim 100, wherein the control unit is adapted to analyze the signal to detect an indication of a change in body disposition of the patient.

102. Apparatus according to claim 90, wherein the biosensor comprises an electroencephalographic (EEG) sensor.

103. Apparatus according to claim 90, wherein the biosensor comprises a blood vessel clot detector.

104. Apparatus according to claim 2, wherein the one or more electrodes are adapted for a period of implantation in the patient less than about one week.

105. Apparatus according to claim 2, wherein the control unit is adapted to configure the current so as to treat a condition of the patient.

106. Apparatus according to claim 105, wherein the condition includes stroke, and wherein the control unit is adapted to configure the current so as to treat the stroke.

107. Apparatus according to claim 105, wherein the condition includes a brain tumor, and wherein the control unit is adapted to configure the current so as to treat the brain tumor.

108. Apparatus according to claim 105, wherein the condition includes epilepsy, and wherein the control unit is adapted to configure the current so as to treat the epilepsy.

109. Apparatus according to claim 105, wherein the condition includes Parkinson's disease, and wherein the control unit is adapted to configure the current so as to treat the Parkinson's disease.

110. Apparatus according to claim 105, wherein the condition includes Alzheimer's disease, and wherein the



control unit is adapted to configure the current so as to treat the Alzheimer's disease.

111. Apparatus according to claim 105, wherein the condition includes multiple sclerosis, and wherein the control unit is adapted to configure the current so as to treat the multiple sclerosis.

112. Apparatus according to claim 105, wherein the condition includes schizophrenia, and wherein the control unit is adapted to configure the current so as to treat the schizophrenia.

113. Apparatus according to claim 105, wherein the condition includes depression, and wherein the control unit is adapted to configure the current so as to treat the depression.

114. Apparatus according to claim 105, wherein the condition includes stress, and wherein the control unit is adapted to configure the current so as to treat the stress.

115. Apparatus according to claim 105, wherein the condition includes anxiety, and wherein the control unit is adapted to configure the current so as to treat the anxiety.

116. Apparatus according to claim 105, wherein the condition includes inflammation in the brain, and wherein the control unit is adapted to configure the current so as to treat the inflammation.

117. Apparatus according to claim 105, wherein the condition includes GM2 gangliosidosis, and wherein the control unit is adapted to configure the current so as to treat the GM2 gangliosidosis.

118. Apparatus according to claim 105, wherein the condition includes AIDS, and wherein the control unit is adapted to configure the current so as to treat the AIDS.

119. Apparatus according to claim 105, wherein the condition includes a motor neuron disease, and wherein the control unit is adapted to configure the current so as to treat the motor neuron disease.

120. Apparatus according to claim 119, wherein the motor neuron disease includes Lou Gehrig's disease, and wherein the control unit is adapted to configure the current so as to treat the Lou Gehrig's disease.

121. Apparatus according to claim 2, wherein the control unit is adapted to set a parameter of the current, so as to induce the increase in cerebral blood flow of the patient.

122. Apparatus according to claim 121, wherein the parameter includes a frequency of the current, and wherein the control unit is adapted to set the frequency of the current, so as to induce the increase in cerebral blood flow of the patient.

123. Apparatus according to claim 122, wherein the control unit is adapted to set the frequency to be less than about 10 Hz, so as to induce the increase in cerebral blood flow of the patient.

124. Apparatus according to claim 122, wherein the control unit is adapted to set the frequency to be greater than about 10 Hz, so as to induce the increase in cerebral blood flow of the patient.

125. Apparatus according to claim 121, wherein the parameter includes an amplitude of the current, and wherein the control unit is adapted to set the amplitude of the current, so as to induce the increase in cerebral blood flow of the patient.

126. Apparatus according to claim 121, wherein the parameter includes a waveform of the current, and wherein the control unit is adapted to set the waveform of the current, so as to induce the increase in cerebral blood flow of the patient.

127. Apparatus according to claim 126, wherein a shape of the waveform is selected from the list consisting of: an exponential decay, a ramp up or down, a square wave, a monophasic shape, a biphasic shape, a sinusoid, a saw tooth, and a DC component, and wherein the control unit is adapted to

set the waveform of the current, so as to induce the increase in cerebral blood flow of the patient.

128. Apparatus according to claim 126, wherein the waveform includes one or more pulse bursts, and wherein the control unit is adapted to set the waveform of the current, so as to induce the increase in cerebral blood flow of the patient.

129. Apparatus according to claim 2, wherein the control unit is adapted to be implanted at a site at a top of a bony palate of the patient.

130. Apparatus according to claim 2, wherein the control unit is adapted to be implanted at a site at a lower side of a bony palate of the patient.

131. A method according to claim 29, wherein applying the current comprises configuring the current so as to treat a condition of the patient.

132. A method according to claim 29, wherein applying the current comprises setting a parameter of the current, so as to induce the increase in permeability of the BBB.

133. A method according to claim 132, wherein the parameter includes a frequency of the current, and wherein setting the parameter comprises setting the frequency of the

current, so as to induce the increase in permeability of the BBB.

134. A method according to claim 133, wherein setting the frequency comprises setting the frequency to be less than about 10 Hz, so as to induce the increase in permeability of the BBB.

135. Apparatus according to claim 133, wherein setting the frequency comprises setting the frequency to be greater than about 10 Hz, so as to induce the increase in permeability of the BBB.

136. A method according to claim 132, wherein the parameter includes an amplitude of the current, and wherein setting the parameter comprises setting the amplitude of the current, so as to induce the increase in permeability of the BBB.

137. A method according to claim 132, wherein the parameter includes a waveform of the current, and wherein setting the parameter comprises setting the waveform of the current, so as to induce the increase in permeability of the BBB.

138. A method according to claim 137, wherein a shape of the waveform is selected from the list consisting of: an exponential decay, a ramp up or down, a square wave, a monophasic shape, a biphasic shape, a sinusoid, a saw tooth,

and a DC component, and wherein setting the parameter comprises setting the waveform of the current, so as to induce the increase in permeability of the BBB.

139. A method according to claim 137, wherein the waveform includes one or more pulse bursts, and wherein setting the parameter comprises setting the waveform of the current, so as to induce the increase in permeability of the BBB.

140. A method according to claim 54, wherein the drug includes a chemotherapeutic drug, and wherein configuring the current comprises configuring the current so as to facilitate uptake of the chemotherapeutic drug through the BBB when the permeability of the BBB is increased.

141. A method according to claim 29, wherein applying the current comprises configuring the current so as to facilitate uptake of a growth factor through the BBB when the permeability of the BBB is increased.

142. A method according to claim 29, wherein applying the current comprises configuring the current so as to facilitate uptake through the BBB of a virus that is an agent of gene therapy when the permeability of the BBB is increased.

143. A method according to claim 29, wherein applying the current comprises implanting a control unit at a site at a top of a bony palate of the patient.

144. A method according to claim 29, wherein applying the current comprises implanting a control unit at a site at a lower side of a bony palate of the patient.

145. A method according to claim 30, wherein selecting the site comprises implanting an electrode at the site, designated to remain in the patient for a period greater than about one month.

146. A method according to claim 30, wherein selecting the site comprises placing an electrode at the site, and wherein applying the current comprises communicating with the electrode by wired communication from a position external to the patient.

147. A method according to claim 30, wherein selecting the site comprises placing an electrode at the site, and wherein applying the current comprises communicating with the electrode by wireless communication from a position external to the patient.

148. A method according to claim 147, wherein communicating comprises communicating via electromagnetic coupling.

149. A method according to claim 147, wherein communicating comprises communicating via electro-optical coupling.

150. A method according to claim 147, wherein communicating comprises communicating via electro-acoustic coupling.

151. A method according to claim 30, wherein applying the current comprises implanting a control unit in a nasal cavity of the patient.

152. A method according to claim 30, wherein applying the current comprises implanting one or more electrodes in a nasal cavity of the patient.

153. A method according to claim 152, wherein implanting comprises inserting a flexible electrode through a nostril of the patient.

154. A method according to claim 30, and comprising sensing a physiological parameter of the patient and generating a signal responsive thereto, wherein applying the current comprises modifying a parameter of the applied current responsive to the signal.

155. A method according to claim 154, wherein sensing comprises sensing blood flow of the patient.

156. A method according to claim 154, wherein sensing comprises sensing a temperature of the patient.



157. A method according to claim 154, wherein sensing comprises sensing presence of a chemical.

158. A method according to claim 154, wherein sensing comprises detecting ultrasonic energy.

159. A method according to claim 154, wherein sensing comprises performing a transcranial Doppler (TCD) technique.

160. A method according to claim 154, wherein sensing comprises performing a laser-Doppler technique.

161. A method according to claim 154, wherein sensing comprises sensing systemic blood pressure of the patient.

162. A method according to claim 154, wherein sensing comprises sensing intracranial blood pressure of the patient.

163. A method according to claim 162, wherein sensing intracranial blood pressure fixing to a cerebral blood vessel a detecting element capable of generating the signal, and analyzing the signal to detect an indication of a change in blood pressure indicative of a clot.

164. A method according to claim 154, wherein sensing comprises sensing a kinetic disposition of the patient.

165. A method according to claim 164, wherein sensing the kinetic disposition comprises detecting an indication of a change in body disposition of the patient.

166. A method according to claim 154, wherein sensing comprises sensing electroencephalographic (EEG) data.

167. A method according to claim 154, wherein sensing comprises detecting presence of an embolus in a blood vessel of the patient.

168. A method according to claim 30, wherein selecting the site comprises implanting an electrode at the site, designated to remain in the patient for a period less than about one week.

169. A method according to claim 30, wherein applying the current comprises configuring the current so as to treat a condition of the patient.

170. A method according to claim 169, wherein the condition includes stroke, and wherein configuring the current comprises configuring the current so as to treat the stroke.

171. A method according to claim 169, wherein the condition includes a brain tumor, and wherein configuring the current comprises configuring the current so as to treat the brain tumor.

172. A method according to claim 169, wherein the condition includes epilepsy, and wherein configuring the

current comprises configuring the current so as to treat the epilepsy.

173. A method according to claim 169, wherein the condition includes Parkinson's disease, and wherein configuring the current comprises configuring the current so as to treat the Parkinson's disease.

174. A method according to claim 169, wherein the condition includes Alzheimer's disease, and wherein configuring the current comprises configuring the current so as to treat the Alzheimer's disease.

175. A method according to claim 169, wherein the condition includes multiple sclerosis, and wherein configuring the current comprises configuring the current so as to treat the multiple sclerosis.

176. A method according to claim 169, wherein the condition includes schizophrenia, and wherein configuring the current comprises configuring the current so as to treat the schizophrenia.

177. A method according to claim 169, wherein the condition includes depression, and wherein configuring the current comprises configuring the current so as to treat the depression.

178. A method according to claim 169, wherein the condition includes stress, and wherein configuring the current comprises configuring the current so as to treat the stress.

179. A method according to claim 169, wherein the condition includes anxiety, and wherein configuring the current comprises configuring the current so as to treat the anxiety.

180. A method according to claim 169, wherein the condition includes inflammation in the brain, and wherein configuring the current comprises configuring the current so as to treat the inflammation.

181. A method according to claim 169, wherein the condition includes GM2 gangliosidosis, and wherein configuring the current comprises configuring the current so as to treat the GM2 gangliosidosis.

182. A method according to claim 169, wherein the condition includes AIDS, and wherein configuring the current comprises configuring the current so as to treat the AIDS.

183. A method according to claim 169, wherein the condition includes a motor neuron disease, and wherein configuring the current comprises configuring the current so as to treat the motor neuron disease.

184. A method according to claim 183, wherein the motor neuron disease includes Lou Gehrig's disease, and

wherein configuring the current comprises configuring so as to treat the Lou Gehrig's disease.

185. A method according to claim 30, wherein applying the current comprises setting a parameter of the current, so as to induce the increase in cerebral blood flow of the patient.

186. A method according to claim 185, wherein the parameter includes a frequency of the current, and wherein setting the parameter comprises setting the frequency of the current, so as to induce the increase in cerebral blood flow of the patient.

187. A method according to claim 186, wherein setting the frequency comprises setting the frequency to be less than about 10 Hz, so as to induce the increase in cerebral blood flow of the patient.

188. Apparatus according to claim 186, wherein setting the frequency comprises setting the frequency to be greater than about 10 Hz, so as to induce the increase in cerebral blood flow of the patient.

189. A method according to claim 185, wherein the parameter includes an amplitude of the current, and wherein setting the parameter comprises setting the amplitude of the current, so as to induce the increase in cerebral blood flow of the patient.

190. A method according to claim 185, wherein the parameter includes a waveform of the current, and wherein setting the parameter comprises setting the waveform of the current, so as to induce the increase in cerebral blood flow of the patient.

191. A method according to claim 190, wherein a shape of the waveform is selected from the list consisting of: an exponential decay, a ramp up or down, a square wave, a monophasic shape, a biphasic shape, a sinusoid, a saw tooth, and a DC component, and wherein setting the parameter comprises setting the waveform of the current, so as to induce the increase in cerebral blood flow of the patient.

192. A method according to claim 190, wherein the waveform includes one or more pulse bursts, and wherein setting the parameter comprises setting the waveform of the current, so as to induce the increase in cerebral blood flow of the patient.

193. A method according to claim 30, wherein applying the current comprises implanting a control unit at a site at a top of a bony palate of the patient.

194. A method according to claim 30, wherein applying the current comprises implanting a control unit at a site at a lower side of a bony palate of the patient.

195. Apparatus for treating a physiological condition of a patient, comprising:

one or more electrodes, adapted to be applied to a site from the group consisting of: a sphenopalatine ganglion (SPG) of the patient and a neural tract originating in or leading to the SPG; and

a control unit, adapted to drive the one or more electrodes to apply a current to the site configured to activate at least one parasympathetic nerve fiber of the SPG, so as to treat the condition.

196. Apparatus according to claim 195, wherein the one or more electrodes are adapted for a period of implantation in the patient greater than about one month.

197. Apparatus according to claim 195, and comprising a wire, adapted to connect the control unit to the one or more electrodes, wherein the control unit is adapted to drive the one or more electrodes from a position external to the patient.

198. Apparatus according to claim 195, wherein the control unit is adapted to drive the one or more electrodes by wireless communication from a position external to the patient.

199. Apparatus according to claim 198, and comprising an electromagnetic coupling, adapted to couple the control unit and the one or more electrodes.

200. Apparatus according to claim 198, wherein the control unit is adapted to be in electro-optical communication with the one or more electrodes.

201. Apparatus according to claim 198, wherein the control unit is adapted to be in electro-acoustic communication with the one or more electrodes.

202. Apparatus according to claim 195, wherein the control unit is adapted to be implanted in a nasal cavity of the patient.

203. Apparatus according to claim 195, wherein the one or more electrodes are adapted to be implanted in a nasal cavity of the patient.

204. Apparatus according to claim 195, wherein at least one of the one or more electrodes comprises a flexible electrode, adapted for insertion through a nostril of the patient and to extend therefrom to the site.

205. Apparatus according to claim 195, and comprising at least one biosensor, adapted to measure a physiological parameter of the patient and to generate a signal responsive thereto, wherein the control unit is adapted



to modify a parameter of the applied current responsive to the signal.

206. Apparatus according to claim 205, wherein the biosensor comprises a blood flow sensor.

207. Apparatus according to claim 205, wherein the biosensor comprises a temperature sensor.

208. Apparatus according to claim 205, wherein the biosensor comprises a chemical sensor.

209. Apparatus according to claim 205, wherein the biosensor comprises an ultrasound sensor.

210. Apparatus according to claim 205, wherein the biosensor comprises transcranial Doppler (TCD) apparatus.

211. Apparatus according to claim 205, wherein the biosensor comprises laser-Doppler apparatus.

212. Apparatus according to claim 205, wherein the biosensor comprises a systemic blood pressure sensor.

213. Apparatus according to claim 205, wherein the biosensor comprises an intracranial blood pressure sensor.

214. Apparatus according to claim 213, wherein the intracranial blood pressure sensor comprises a detecting element adapted to be fixed to a cerebral blood vessel, and wherein the control unit is adapted to analyze the signal to detect an indication of a change in blood pressure indicative of a clot.

215. Apparatus according to claim 205, wherein the biosensor comprises a kinetics sensor.

216. Apparatus according to claim 215, wherein the control unit is adapted to analyze the signal to detect an indication of a change in body disposition of the patient.

217. Apparatus according to claim 205, wherein the biosensor comprises an electroencephalographic (EEG) sensor.

218. Apparatus according to claim 205, wherein the biosensor comprises a blood vessel clot detector.

219. Apparatus according to claim 195, wherein the one or more electrodes are adapted for a period of implantation in the patient less than about one week.

220. Apparatus according to claim 195, wherein the control unit is adapted to configure the current to induce an increase in permeability of a blood-brain barrier (BBB) of the patient, so as to treat the condition.

221. Apparatus according to claim 195, wherein the control unit is adapted to configure the current so as to induce an increase in cerebral blood flow of the patient, so as to treat the condition.

222. Apparatus according to claim 195, wherein the condition includes stroke, and wherein the control unit is adapted to configure the current so as to treat the stroke.

223. Apparatus according to claim 195, wherein the condition includes a brain tumor, and wherein the control unit is adapted to configure the current so as to treat the brain tumor.

224. Apparatus according to claim 195, wherein the condition includes epilepsy, and wherein the control unit is adapted to configure the current so as to treat the epilepsy.

225. Apparatus according to claim 195, wherein the condition includes Parkinson's disease, and wherein the control unit is adapted to configure the current so as to treat the Parkinson's disease.

226. Apparatus according to claim 195, wherein the condition includes Alzheimer's disease, and wherein the control unit is adapted to configure the current so as to treat the Alzheimer's disease.

227. Apparatus according to claim 195, wherein the condition includes multiple sclerosis, and wherein the control unit is adapted to configure the current so as to treat the multiple sclerosis.

228. Apparatus according to claim 195, wherein the condition includes schizophrenia, and wherein the control unit is adapted to configure the current so as to treat the schizophrenia.

229. Apparatus according to claim 195, wherein the condition includes depression, and wherein the control unit is adapted to configure the current so as to treat the depression.

230. Apparatus according to claim 195, wherein the condition includes stress, and wherein the control unit is adapted to configure the current so as to treat the stress.

231. Apparatus according to claim 195, wherein the condition includes anxiety, and wherein the control unit is adapted to configure the current so as to treat the anxiety.

232. Apparatus according to claim 195, wherein the condition includes inflammation in the brain, and wherein the control unit is adapted to configure the current so as to treat the inflammation.

233. Apparatus according to claim 195, wherein the condition includes GM2 gangliosidosis, and wherein the control unit is adapted to configure the current so as to treat the GM2 gangliosidosis.

234. Apparatus according to claim 195, wherein the condition includes AIDS, and wherein the control unit is adapted to configure the current so as to treat the AIDS.

235. Apparatus according to claim 195, wherein the condition includes a motor neuron disease, and wherein the

control unit is adapted to configure the current so as to treat the motor neuron disease.

236. Apparatus according to claim 235, wherein the motor neuron disease includes Lou Gehrig's disease, and wherein the control unit is adapted to configure the current so as to treat the Lou Gehrig's disease.

237. Apparatus according to claim 195, wherein the control unit is adapted to treat the condition by setting a parameter of the current.

238. Apparatus according to claim 237, wherein the parameter includes a frequency of the current, and wherein the control unit is adapted to treat the condition by setting the frequency of the current.

239. Apparatus according to claim 238, wherein the control unit is adapted to treat the condition by setting the frequency to be less than about 10 Hz.

240. Apparatus according to claim 238, wherein the control unit is adapted to treat the condition by setting the frequency to be greater than about 10 Hz.

241. Apparatus according to claim 237, wherein the parameter includes an amplitude of the current, and wherein the control unit is adapted to treat the condition by setting the amplitude of the current.

242. Apparatus according to claim 237, wherein the parameter includes a waveform of the current, and wherein the control unit is adapted to treat the condition by setting the waveform of the current.

243. Apparatus according to claim 242, wherein a shape of the waveform is selected from the list consisting of: an exponential decay, a ramp up or down, a square wave, a monophasic shape, a biphasic shape, a sinusoid, a saw tooth, and a DC component, and wherein the control unit is adapted to treat the condition by setting the waveform of the current.

244. Apparatus according to claim 242, wherein the waveform includes one or more pulse bursts, and wherein the control unit is adapted to treat the condition by setting the waveform of the current.

245. Apparatus according to claim 195, wherein the control unit is adapted to be implanted at a site at a top of a bony palate of the patient.

246. Apparatus according to claim 195, wherein the control unit is adapted to be implanted at a site at a lower side of a bony palate of the patient.

247. Apparatus for delivering a therapeutic agent, administered to a systemic blood circulation of a patient, to a brain of the patient, comprising:

one or more electrodes, adapted to be applied to a site from the group consisting of: a sphenopalatine ganglion (SPG) of the patient and a neural tract originating in or leading to the SPG; and

a control unit, adapted to drive the one or more electrodes to apply a current to the site configured to increase molecular passage across a blood-brain barrier (BBB) to a magnitude that increases passage of the agent from the blood circulation through the BBB into the brain, so as to treat a condition of the patient.

248. Apparatus according to claim 247, wherein the one or more electrodes are adapted for a period of implantation in the patient greater than about one month.

249. Apparatus according to claim 247, and comprising a wire, adapted to connect the control unit to the one or more electrodes, wherein the control unit is adapted to drive the one or more electrodes from a position external to the patient.

250. Apparatus according to claim 247, wherein the control unit is adapted to drive the one or more electrodes by wireless communication from a position external to the patient.

251. Apparatus according to claim 250, and comprising an electromagnetic coupling, adapted to couple the control unit and the one or more electrodes.

252. Apparatus according to claim 250, wherein the control unit is adapted to be in electro-optical communication with the one or more electrodes.

253. Apparatus according to claim 250, wherein the control unit is adapted to be in electro-acoustic communication with the one or more electrodes.

254. Apparatus according to claim 247, wherein the control unit is adapted to be implanted in a nasal cavity of the patient.

255. Apparatus according to claim 247, wherein the one or more electrodes are adapted to be implanted in a nasal cavity of the patient.

256. Apparatus according to claim 247, wherein at least one of the one or more electrodes comprises a flexible electrode, adapted for insertion through a nostril of the patient and to extend therefrom to the site.

257. Apparatus according to claim 247, and comprising at least one biosensor, adapted to measure a physiological parameter of the patient and to generate a signal responsive thereto, wherein the control unit is adapted



to modify a parameter of the applied current responsive to the signal.

258. Apparatus according to claim 257, wherein the biosensor comprises a blood flow sensor.

259. Apparatus according to claim 257, wherein the biosensor comprises a temperature sensor.

260. Apparatus according to claim 257, wherein the biosensor comprises a chemical sensor.

261. Apparatus according to claim 257, wherein the biosensor comprises an ultrasound sensor.

262. Apparatus according to claim 257, wherein the biosensor comprises transcranial Doppler (TCD) apparatus.

263. Apparatus according to claim 257, wherein the biosensor comprises laser-Doppler apparatus.

264. Apparatus according to claim 257, wherein the biosensor comprises a systemic blood pressure sensor.

265. Apparatus according to claim 257, wherein the biosensor comprises an intracranial blood pressure sensor.

266. Apparatus according to claim 265, wherein the intracranial blood pressure sensor comprises a detecting element adapted to be fixed to a cerebral blood vessel, and wherein the control unit is adapted to analyze the signal to detect an indication of a change in blood pressure indicative of a clot.

267. Apparatus according to claim 257, wherein the biosensor comprises a kinetics sensor.

268. Apparatus according to claim 267, wherein the control unit is adapted to analyze the signal to detect an indication of a change in body disposition of the patient.

269. Apparatus according to claim 257, wherein the biosensor comprises an electroencephalographic (EEG) sensor.

270. Apparatus according to claim 257, wherein the biosensor comprises a blood vessel clot detector.

271. Apparatus according to claim 247, wherein the one or more electrodes are adapted for a period of implantation in the patient less than about one week.

272. Apparatus according to claim 247, wherein the condition includes a brain tumor, and wherein the control unit is adapted to configure the current so as to treat the brain tumor.

273. Apparatus according to claim 247, wherein the condition includes epilepsy, and wherein the control unit is adapted to configure the current so as to treat the epilepsy.

274. Apparatus according to claim 247, wherein the condition includes Parkinson's disease, and wherein the control unit is adapted to configure the current so as to treat the Parkinson's disease.

275. Apparatus according to claim 247, wherein the condition includes Alzheimer's disease, and wherein the control unit is adapted to configure the current so as to treat the Alzheimer's disease.

276. Apparatus according to claim 247, wherein the condition includes multiple sclerosis, and wherein the control unit is adapted to configure the current so as to treat the multiple sclerosis.

277. Apparatus according to claim 247, wherein the condition includes schizophrenia, and wherein the control unit is adapted to configure the current so as to treat the schizophrenia.

278. Apparatus according to claim 247, wherein the condition includes depression, and wherein the control unit is adapted to configure the current so as to treat the depression.

295. Apparatus according to claim 247, wherein the condition includes stress, and wherein the control unit is adapted to configure the current so as to treat the stress.

280. Apparatus according to claim 247, wherein the condition includes anxiety, and wherein the control unit is adapted to configure the current so as to treat the anxiety.

281. Apparatus according to claim 247, wherein the condition includes inflammation in the brain, and wherein the

control unit is adapted to configure the current so as to treat the inflammation.

282. Apparatus according to claim 247, wherein the condition includes GM2 gangliosidosis, and wherein the control unit is adapted to configure the current so as to treat the GM2 gangliosidosis.

283. Apparatus according to claim 247, wherein the condition includes AIDS, and wherein the control unit is adapted to configure the current so as to treat the AIDS.

284. Apparatus according to claim 247, wherein the condition includes a motor neuron disease, and wherein the control unit is adapted to configure the current so as to treat the motor neuron disease.

285. Apparatus according to claim 284, wherein the motor neuron disease includes Lou Gehrig's disease, and wherein the control unit is adapted to configure the current so as to treat the Lou Gehrig's disease.

286. Apparatus according to claim 247, wherein the control unit is adapted to set a parameter of the current, so as to increase the passage of the agent from the blood circulation through the BBB into the brain.

287. Apparatus according to claim 286, wherein the parameter includes a frequency of the current, and wherein the control unit is adapted to set the frequency of the current,

so as to increase the passage of the agent from the blood circulation through the BBB into the brain.

288. Apparatus according to claim 287, wherein the control unit is adapted to set the frequency to be less than about 10 Hz, so as to increase the passage of the agent from the blood circulation through the BBB into the brain.

289. Apparatus according to claim 287, wherein the control unit is adapted to set the frequency to be greater than about 10 Hz, so as to increase the passage of the agent from the blood circulation through the BBB into the brain.

290. Apparatus according to claim 286, wherein the parameter includes an amplitude of the current, and wherein the control unit is adapted to set the amplitude of the current, so as to increase the passage of the agent from the blood circulation through the BBB into the brain.

291. Apparatus according to claim 286, wherein the parameter includes a waveform of the current, and wherein the control unit is adapted to set the waveform of the current, so as to increase the passage of the agent from the blood circulation through the BBB into the brain.

292. Apparatus according to claim 291, wherein a shape of the waveform is selected from the list consisting of: an exponential decay, a ramp up or down, a square wave, a monophasic shape, a biphasic shape, a sinusoid, a saw tooth,

and a DC component, and wherein the control unit is adapted to set the waveform of the current, so as to increase the passage of the agent from the blood circulation through the BBB into the brain.

293. Apparatus according to claim 291, wherein the waveform includes one or more pulse bursts, and wherein the control unit is adapted to set the waveform of the current, so as to increase the passage of the agent from the blood circulation through the BBB into the brain.

294. Apparatus according to claim 247, wherein the therapeutic agent includes a drug, and wherein the control unit is adapted to increase the passage of the drug through the BBB when the molecular passage across the BBB is increased, so as to treat the condition.

295. Apparatus according to claim 294, wherein the drug includes a chemotherapeutic drug, and wherein the control unit is adapted to increase the passage of the chemotherapeutic drug through the BBB when the molecular passage across the BBB is increased, so as to treat the condition.

296. Apparatus according to claim 294, wherein the therapeutic agent includes a growth factor, and wherein the control unit is adapted to increase the passage of the growth

factor through the BBB when the molecular passage across the BBB is increased, so as to treat the condition.

297. Apparatus according to claim 294, wherein the therapeutic agent includes a virus that is an agent of gene therapy, and wherein the control unit is adapted to increase the passage of the virus through the BBB when the molecular passage across the BBB is increased, so as to treat the condition.

298. Apparatus according to claim 247, wherein the control unit is adapted to be implanted at a site at a top of a bony palate of the patient.

299. Apparatus according to claim 247, wherein the control unit is adapted to be implanted at a site at a lower side of a bony palate of the patient.

300. A method for treating a physiological condition of a patient, comprising:

applying a current to a site from the group consisting of: a sphenopalatine ganglion (SPG) of the patient and a neural tract originating in or leading to the SPG; and

configuring the current so as to activate at least one parasympathetic nerve fiber of the SPG, so as to treat the condition.

301. A method according to claim 300, wherein applying the current comprises implanting an electrode at the

site, designated to remain in the patient for a period greater than about one month.

302. A method according to claim 300, wherein applying the current comprises:

placing an electrode at the site; and  
communicating with the electrode by wired communication from a position external to the patient.

303. A method according to claim 300, wherein applying the current comprises:

placing an electrode at the site; and  
communicating with the electrode by wireless communication from a position external to the patient.

304. A method according to claim 303, wherein communicating comprises communicating via electromagnetic coupling.

305. A method according to claim 303, wherein communicating comprises communicating via electro-optical coupling.

306. A method according to claim 303, wherein communicating comprises communicating via electro-acoustic coupling.

307. A method according to claim 300, wherein applying the current comprises implanting a control unit in a nasal cavity of the patient.



308. A method according to claim 300, wherein applying the current comprises implanting one or more electrodes in a nasal cavity of the patient.

309. A method according to claim 308, wherein implanting comprises inserting a flexible electrode through a nostril of the patient.

310. A method according to claim 300, and comprising sensing a physiological parameter of the patient and generating a signal responsive thereto, wherein applying the current comprises modifying a parameter of the applied current responsive to the signal.

311. A method according to claim 310, wherein sensing comprises sensing blood flow of the patient.

312. A method according to claim 310, wherein sensing comprises sensing a temperature of the patient.

313. A method according to claim 310, wherein sensing comprises sensing presence of a chemical.

314. A method according to claim 310, wherein sensing comprises detecting ultrasonic energy.

315. A method according to claim 310, wherein sensing comprises performing a transcranial Doppler (TCD) technique.

316. A method according to claim 310, wherein sensing comprises performing a laser-Doppler technique.

317. A method according to claim 310, wherein sensing comprises sensing systemic blood pressure of the patient.

318. A method according to claim 310, wherein sensing comprises sensing intracranial blood pressure of the patient.

319. A method according to claim 318, wherein sensing intracranial blood pressure fixing to a cerebral blood vessel a detecting element capable of generating the signal, and analyzing the signal to detect an indication of a change in blood pressure indicative of a clot.

320. A method according to claim 310, wherein sensing comprises sensing a kinetic disposition of the patient.

321. A method according to claim 320, wherein sensing the kinetic disposition comprises detecting an indication of a change in body disposition of the patient.

322. A method according to claim 310, wherein sensing comprises sensing electroencephalographic (EEG) data.

323. A method according to claim 310, wherein sensing comprises detecting presence of an embolus in a blood vessel of the patient.

324. A method according to claim 300, wherein applying the current comprises implanting an electrode at the

site, designated to remain in the patient for a period less than about one week.

325. A method according to claim 300, wherein configuring the current comprises configuring the current to induce an increase in permeability of a blood-brain barrier (BBB) of the patient, so as to treat the condition.

326. A method according to claim 300, wherein configuring the current comprises configuring the current so as to induce an increase in cerebral blood flow of the patient, so as to treat the condition.

327. A method according to claim 300, wherein the condition includes stroke, and wherein configuring the current comprises configuring the current so as to treat the stroke.

328. A method according to claim 300, wherein the condition includes a brain tumor, and wherein configuring the current comprises configuring the current so as to treat the brain tumor.

329. A method according to claim 300, wherein the condition includes epilepsy, and wherein configuring the current comprises configuring the current so as to treat the epilepsy.

330. A method according to claim 300, wherein the condition includes Parkinson's disease, and wherein

configuring the current comprises configuring the current so as to treat the Parkinson's disease.

331. A method according to claim 300, wherein the condition includes Alzheimer's disease, and wherein configuring the current comprises configuring the current so as to treat the Alzheimer's disease.

332. A method according to claim 300, wherein the condition includes multiple sclerosis, and wherein configuring the current comprises configuring the current so as to treat the multiple sclerosis.

333. A method according to claim 300, wherein the condition includes schizophrenia, and wherein configuring the current comprises configuring the current so as to treat the schizophrenia.

334. A method according to claim 300, wherein the condition includes depression, and wherein configuring the current comprises configuring the current so as to treat the depression.

335. A method according to claim 300, wherein the condition includes stress, and wherein configuring the current comprises configuring the current so as to treat the stress.

336. A method according to claim 300, wherein the condition includes anxiety, and wherein configuring the

current comprises configuring the current so as to treat the anxiety.

337. A method according to claim 300, wherein the condition includes inflammation in the brain, and wherein configuring the current comprises configuring the current so as to treat the inflammation.

338. A method according to claim 300, wherein the condition includes GM2 gangliosidosis, and wherein configuring the current comprises configuring the current so as to treat the GM2 gangliosidosis.

339. A method according to claim 300, wherein the condition includes AIDS, and wherein configuring the current comprises configuring the current so as to treat the AIDS.

340. A method according to claim 300, wherein the condition includes a motor neuron disease, and wherein configuring the current comprises configuring the current so as to treat the motor neuron disease.

341. Apparatus according to claim 340, wherein the motor neuron disease includes Lou Gehrig's disease, and wherein configuring the current comprises configuring the current so as to treat the Lou Gehrig's disease.

342. A method according to claim 300, wherein configuring the current comprises setting a parameter of the current, so as to treat the condition.

343. A method according to claim 342, wherein the parameter includes a frequency of the current, and wherein setting the parameter comprises setting the frequency of the current, so as to treat the condition.

344. A method according to claim 343, wherein setting the frequency comprises setting the frequency to be less than about 10 Hz, so as to treat the condition.

345. Apparatus according to claim 343, wherein setting the frequency comprises setting the frequency to be greater than about 10 Hz, so as to treat the condition.

346. A method according to claim 342, wherein the parameter includes an amplitude of the current, and wherein setting the parameter comprises setting the amplitude of the current, so as to treat the condition.

347. A method according to claim 342, wherein the parameter includes a waveform of the current, and wherein setting the parameter comprises setting the waveform of the current, so as to treat the condition.

348. A method according to claim 347, wherein a shape of the waveform is selected from the list consisting of: an exponential decay, a ramp up or down, a square wave, a monophasic shape, a biphasic shape, a sinusoid, a saw tooth, and a DC component, and wherein setting the parameter

comprises setting the waveform of the current, so as to treat the condition.

349. A method according to claim 347, wherein the waveform includes one or more pulse bursts, and wherein setting the parameter comprises setting the waveform of the current, so as to treat the condition.

350. A method according to claim 300, wherein applying the current comprises implanting a control unit at a site at a top of a bony palate of the patient.

351. A method according to claim 300, wherein applying the current comprises implanting a control unit at a site at a lower side of a bony palate of the patient.

352. A method for delivering a therapeutic agent to a brain of a patient, comprising:

administering the agent to a systemic blood circulation of the patient;

applying a current to a site from the group consisting of: a sphenopalatine ganglion (SPG) of the patient and a neural tract originating in or leading to the SPG; and

configuring the current to increase molecular passage across a blood-brain barrier (BBB) to a magnitude that increases passage of the agent from the blood circulation through the BBB into the brain, so as to treat a condition of the patient.

353. A method according to claim 352, wherein applying the current comprises implanting an electrode at the site, designated to remain in the patient for a period greater than about one month.

354. A method according to claim 352, wherein applying the current comprises:

placing an electrode at the site; and  
communicating with the electrode by wired communication from a position external to the patient.

355. A method according to claim 352, wherein applying the current comprises:

placing an electrode at the site; and  
communicating with the electrode by wireless communication from a position external to the patient.

356. A method according to claim 355, wherein communicating comprises communicating via electromagnetic coupling.

357. A method according to claim 355, wherein communicating comprises communicating via electro-optical coupling.

358. A method according to claim 355, wherein communicating comprises communicating via electro-acoustic coupling.



359. A method according to claim 352, wherein applying the current comprises implanting a control unit in a nasal cavity of the patient.

360. A method according to claim 352, wherein applying the current comprises implanting one or more electrodes in a nasal cavity of the patient.

361. A method according to claim 360, wherein implanting comprises inserting a flexible electrode through a nostril of the patient.

362. A method according to claim 352, and comprising sensing a physiological parameter of the patient and generating a signal responsive thereto, wherein applying the current comprises modifying a parameter of the applied current responsive to the signal.

363. A method according to claim 362, wherein sensing comprises sensing blood flow of the patient.

364. A method according to claim 362, wherein sensing comprises sensing a temperature of the patient.

365. A method according to claim 362, wherein sensing comprises sensing presence of a chemical.

366. A method according to claim 362, wherein sensing comprises detecting ultrasonic energy.

367. A method according to claim 362, wherein sensing comprises performing a transcranial Doppler (TCD) technique.

368. A method according to claim 362, wherein sensing comprises performing a laser-Doppler technique.

369. A method according to claim 362, wherein sensing comprises sensing systemic blood pressure of the patient.

370. A method according to claim 362, wherein sensing comprises sensing intracranial blood pressure of the patient.

371. A method according to claim 370, wherein sensing intracranial blood pressure fixing to a cerebral blood vessel a detecting element capable of generating the signal, and analyzing the signal to detect an indication of a change in blood pressure indicative of a clot.

372. A method according to claim 362, wherein sensing comprises sensing a kinetic disposition of the patient.

373. A method according to claim 372, wherein sensing the kinetic disposition comprises detecting an indication of a change in body disposition of the patient.

374. A method according to claim 362, wherein sensing comprises sensing electroencephalographic (EEG) data.

375. A method according to claim 362, wherein sensing comprises detecting presence of an embolus in a blood vessel of the patient.

376. A method according to claim 352, wherein applying the current comprises implanting an electrode at the site, designated to remain in the patient for a period less than about one week.

377. A method according to claim 352, wherein the condition includes a brain tumor, and wherein configuring the current comprises configuring the current so as to treat the brain tumor.

378. A method according to claim 352, wherein the condition includes epilepsy, and wherein configuring the current comprises configuring the current so as to treat the epilepsy.

379. A method according to claim 352, wherein the condition includes Parkinson's disease, and wherein configuring the current comprises configuring the current so as to treat the Parkinson's disease.

380. A method according to claim 352, wherein the condition includes Alzheimer's disease, and wherein configuring the current comprises configuring the current so as to treat the Alzheimer's disease.

381. A method according to claim 352, wherein the condition includes multiple sclerosis, and wherein configuring the current comprises configuring the current so as to treat the multiple sclerosis.

382. A method according to claim 352, wherein the condition includes schizophrenia, and wherein configuring the current comprises configuring the current so as to treat the schizophrenia.

383. A method according to claim 352, wherein the condition includes depression, and wherein configuring the current comprises configuring the current so as to treat the depression.

384. A method according to claim 352, wherein the condition includes stress, and wherein configuring the current comprises configuring the current so as to treat the stress.

385. A method according to claim 352, wherein the condition includes anxiety, and wherein configuring the current comprises configuring the current so as to treat the anxiety.

386. A method according to claim 352, wherein the condition includes inflammation in the brain, and wherein configuring the current comprises configuring the current so as to treat the inflammation.

387. A method according to claim 352, wherein the condition includes GM2 gangliosidosis, and wherein configuring the current comprises configuring the current so as to treat the GM2 gangliosidosis.

388. A method according to claim 352, wherein the condition includes AIDS, and wherein configuring the current comprises configuring the current so as to treat the AIDS.

389. A method according to claim 352, wherein the condition includes a motor neuron disease, and wherein configuring the current comprises configuring the current so as to treat the motor neuron disease.

390. A method according to claim 389, wherein the motor neuron disease includes Lou Gehrig's disease, and wherein configuring the current comprises configuring the current so as to treat the Lou Gehrig's disease.

391. A method according to claim 352, wherein configuring the current comprises setting a parameter of the current, so as to increase the passage of the agent from the blood circulation through the BBB into the brain.

392. A method according to claim 391, wherein the parameter includes a frequency of the current, and wherein setting the parameter comprises setting the frequency of the current, so as to increase the passage of the agent from the blood circulation through the BBB into the brain.

393. A method according to claim 392, wherein setting the frequency comprises setting the frequency to be less than about 10 Hz, so as to increase the passage of the agent from the blood circulation through the BBB into the brain.

394. Apparatus according to claim 392, wherein setting the frequency comprises setting the frequency to be greater than about 10 Hz, so as to increase the passage of the agent from the blood circulation through the BBB into the brain.

395. A method according to claim 391, wherein the parameter includes an amplitude of the current, and wherein setting the parameter comprises setting the amplitude of the current, so as to increase the passage of the agent from the blood circulation through the BBB into the brain.

396. A method according to claim 391, wherein the parameter includes a waveform of the current, and wherein setting the parameter comprises setting the waveform of the current, so as to increase the passage of the agent from the blood circulation through the BBB into the brain.

397. A method according to claim 396, wherein a shape of the waveform is selected from the list consisting of: an exponential decay, a ramp up or down, a square wave, a monophasic shape, a biphasic shape, a sinusoid, a saw tooth,

and a DC component, and wherein setting the parameter comprises setting the waveform of the current, so as to increase the passage of the agent from the blood circulation through the BBB into the brain.

398. A method according to claim 396, wherein the waveform includes one or more pulse bursts, and wherein setting the parameter comprises setting the waveform of the current, so as to increase the passage of the agent from the blood circulation through the BBB into the brain.

399. A method according to claim 352, wherein the therapeutic agent includes a drug, and wherein administering the agent comprises administering the drug.

400. A method according to claim 399, wherein the drug includes a chemotherapeutic drug, and wherein administering the drug comprises administering the chemotherapeutic drug.

401. A method according to claim 399, wherein the therapeutic agent includes a growth factor, and wherein administering the agent comprises administering the growth factor.

402. A method according to claim 399, wherein the therapeutic agent includes a virus that is an agent of gene therapy, and wherein administering the agent comprises administering the virus.

403. A method according to claim 352, wherein applying the current comprises implanting a control unit at a site at a top of a bony palate of the patient.

404. A method according to claim 352, wherein applying the current comprises implanting a control unit at a site at a lower side of a bony palate of the patient.

405. A method for delivering a stimulator, comprising:

removably attaching the stimulator to a distal end of an introducer rod;

inserting the rod into a nasal passage of a patient;  
and

positioning the stimulator at a site from the group consisting of: a sphenopalatine ganglion (SPG) of the patient and a neural tract originating in or leading to the SPG.

406. A method according to claim 405, wherein positioning the stimulator comprises guiding the stimulator using a technique selected from the list consisting of: fluoroscopy, x-ray guidance, and fine endoscopic surgery (FES).